

## X-Ray Fluorescence Analyzer

### Abstract

- 5 An x-ray fluorescence analyzer and method. The analyzer and method use a single radio- active source, such as,  $^{241}\text{Am}$  to determine the composition of a metal alloy or precious metal. The method compensates for Rayleigh scattering by first determining a scaling factor using a particular energy line in the spectrum of the test material and comparing that line to the same energy line for a pure metal.
- 10 Based on the scaling factor the energy spectrum for the pure is compensated and then subtracted from the energy spectrum of the test material at discrete points.

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